

PAT-NO: JP02000151023A
DOCUMENT-IDENTIFIER: JP 2000151023 A
TITLE: SEMICONDUCTOR LIGHT EMITTING DEVICE

PUBN-DATE: May 30, 2000

INVENTOR-INFORMATION:

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APPL-NO: JP10314596
APPL-DATE: November 5, 1998

INT-CL (IPC): H01S005/323

ABSTRACT:

PROBLEM TO BE SOLVED: To reduce threshold current density by providing a high density doped layer which is locally doped in higher density than a total p-type clad layer at the boundary side of the p-type clad layer and a p-side light guide layer without providing an electron blocking layer.

SOLUTION: A high density doped layer 6 which is locally doped in higher density than a total p-type clad layer 5 is provided at the boundary side of the p-type clad layer 5 and a p-side light guiding layer 3. By the means, the positive hole density can

be enhanced and the series resistance is reduced by providing a high density doped layer 6 which is locally doped in high density at a part of the p-type clad layer 5 without degrading a crystal performance of the p-type clad layer 5. Also, a conductive band side of the high density doped layer 6 is relatively higher than another region of the p-type clad layer 5 at a conductive band terminal, therefore it operates as an obstructing wall against electrons. By the means a threshold current density can be reduced.

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